

## CLAIMS

1. (Once Amended) A bus, having at least an address remapper defining two sections in the bus, each section comprising at least one station having a physical address, wherein stations on each section of the bus are each assigned a dummy address for being addressed by a station on the other section, the address remapper remapping a dummy address from one section into a physical address to the other section.
2. A bus according to claim 1, wherein the format of a physical address comprises a fixed part and a setable part, and wherein the dummy address is obtained by changing at least one bit of the fixed part of the physical address.
3. (Once Amended) A bus according to claim 1, wherein the dummy addresses for stations out of a given section are different from the physical addresses for stations in said given section.
4. (Once Amended) An address remapper for a bus, comprising:
  - terminals for connecting two sections of the bus;
  - address detecting means for detecting an address received from one section of the bus;
  - address remapping means for remapping the address and transmitting the remapped address to the other section of the bus.
5. (Once Amended) An address remapper according to claim 4, wherein the bus is a two wire serial bus, and wherein the address detecting means detect a transition of the value on one wire while the other wire is a given level.
6. (Once Amended) An address remapper according to claim 4, wherein the bus is a two wire serial bus, and wherein the address remapping means comprise means for bringing one wire to a given level.

7. (Once Amended) An address remapper according to claim 4, wherein the bus is a two wire serial bus having one data wire and one clock wire, the terminals for the clock wire of each section being connected.
8. (Twice Amended) An address remapper according to claim 7, wherein the address remapping means includes switching means for selectively disconnecting the bus during the remapping operation.
10. A process for connecting two sections of a bus, by transmitting data from one section of the bus to the other section of the bus, comprising the steps of
  - detecting an address sent from one section of the bus to the other section of the bus;
  - remapping the address before transmitting it to the other section of the bus.
11. A process according to claim 10, wherein the step of detecting comprises detecting a START condition preceding an address.
12. A process according to claim 11, wherein the step of remapping comprises changing at least one bit of an address, preferably one bit of a fixed part of an address.
13. A computer system including a bus, having at least an address remapper defining two sections in the bus, each section comprising at least one station having a physical address, wherein a station on one section of the bus is assigned a dummy address for being addressed by a station on the other section, the address remapper remapping a dummy address from the other section into a physical address to the one section.
14. A computer system according to claim 13, wherein the format of a physical address comprises a fixed part and a setable part, and wherein the dummy address is obtained by changing at least one bit of the fixed part of the physical address.

15. A computer system according to claim 13, wherein the dummy addresses for stations out of a given section are different from the physical addresses for stations in said given section.

16. A bus having at least an address remapper defining at least two sections of the bus, each section of the bus having at least one station having a physical address and wherein each station in each section of the bus is assigned a dummy address for use when being addressed by a station on the other bus section, the address remapper remapping dummy addresses on either section of the bus into a corresponding physical address on the other section of the bus.

17. The bus of claim 16 wherein a station on one portion of the bus and another station on the other portion of the bus share a common physical address.

DI 18. (New) A bus, having at least an address remapper defining two sections in the bus, each section including at least one station having a physical address, wherein each station on each section of the bus is assigned a dummy address by the remapper for the purpose of being addressed by a station on the other section, the address remapper transparently remapping each dummy address from one section into a physical address on the other section.

19. (New) A bus as claimed in claim 16 wherein the address remapping is performed by changing at least one bit of the address of each station.